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ABSTRACT

Models of five alternative ways to approach the evaluation of organizational development (OD) projects are sketched: (1) ask the expert; (2) what's the target; (3) did we hit the target; (4) mid-course correction; and (5) continuous monitoring. Each model provides a different perspective on the problem of evaluation and each contains certain advantages and disadvantages. The five approaches are next put into organizational context by a survey of some major obstacles to effective evaluation studies. Persistent obstacles are found in the client, in the OD consultant, and within the OD activitv itself. In the final section, two issues are addressed that must be faced in any effort to evaluate an OD program--clarity of the role of evaluation and the audience of the evaluation. (Author)

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MONITORING THE PROCESS AND EVALUATING THE RESULTS OF ORGANIZATION DEVELOPMENT

by

Donald C. King
and
John J. Sherwood

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Monitoring the Process and Evaluating the Results of Organization Development

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"How are we doing?" is a question often asked amid the uncertainties, ambiguities, anxieties, and newness that accompany many attempts at improving organizational effectiveness. While the people involved in these activities are raising this question, their supervisors and other interested onlookers on the outside are raising the question of accountability. Those supplying resources or those onlookers who see themselves being affected by any outcomes of an OD project are likely to be interested in measuring the product or evaluating the outcomes. Their question is: "What are you doing?" So, two questions are frequently raised, often by different parties carrying different perspectives: "How are we doing?"and "What are you doing?" This paper provides some ways of thinking about these questions and some alternative models for evaluating organization development efforts.

Our interest in writing this paper stems from three concerns or beliefs. The first is the frustration we have experienced in trying to induce organizations to devote time, money, and other resources to evaluating

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OD efforts. The second is our belief that evaluation has too often been viewed in a non-differientiated, all-or-nothing way. We reject the idea that there is one best way to evaluate organization development. We see instead several kinds of appropriate evaluational activities ranging on a continuum from careful documentation of what occurs in an OD project, through process feedback, to evaluation of outcomes, and finally to field research where specific hypotheses or alternative approaches are rigorously tested using the skills and safeguards of the research scientist. All these approaches address themselves to the questions, "How are we doing?" and "What are you doing?"

This paper does not focus on how to conduct evaluation studies. Hopefully, it lays out considerations and raises issues which will enable the reader to make better decisions about how his own OD projects can most effectively be evaluated.

We begin by offering five alternative approaches to evaluation and give advantages and disadvantages of each approach. Next, these five models are put into an organizational context by a survey of some of the persistent obstacles to effective evaluation. Finally, two major issues in the design and execution of any evaluation scheme are outlined.

We hope the reader becomes more aware of the alternatives available to him in evaluating OD activities, and recognizes that there is not a single best approach to evaluation. We also hope to increase appreciation for the barriers that exist to evaluation and to increase understanding about why they exist. In our judgment, people have frequently deplored the lack of evaluation studies and have tried to cajole one another into doing more and better evaluation of OD projects without a thorough understanding of the reasons for lack of a history of sound studies evaluating organization development.

Five Models

Let's begin with a committee working on a task. How does a committee know how it's doing on its task and how do the members know how they are performing as parts of the problem-solving process? How does the organization know what contribution the committee makes to the goals of the organization? There are several ways to evaluate the performance of a committee and its members. Each provides us with a different model by which we can approach the evaluation of organization development projects.

Here are five models: (1) Ask the expert; (2) What's the target?; (3) Did we hit the target?; (4) Mid-course correction; and (5) Continuous monitoring. Each of these approaches provides a different perspective and each carries certain advantages and disadvantages (Weiss & Rein, 1970).

1. Ask the expert. A consultant is asked to provide an independent evaluation of an OD program. The question is, "Tell us how we're doing or how they're doing!" The answer is given by an expert. This model usually calls for evaluation following the completion of OD activities, but expert assistance can take place at any point in the life of a developmental project. While expert evaluation is often given by an outside consultant in the form of a research contract, an internal consultant can also offer an expert evaluation. However, the closer the evaluator is to the organization and its project, the more likely he is to take the project's basic assumptions and organizational arrangements as given and conduct his evaluation within the existing framework. An outsider may be able, on the other hand, to exercise more autonomy in his questioning and take an independent perspective simply because he is not part of the culture. "The implications he draws from evaluation data may be oriented less to tinkering and more to fundamental restructuring of the program" (Weiss, 1972a, p. 21).

One dilemma in asking the expert is that the credibility of his response may differ depending on the audience. Those outside the OD activity, who are asking for accountability, are less likely to view his assessment as biased or self-serving than if the same information were to come from people involved in the change process. Whereas for the later, unless the expert is able to establish that he has an empathic understanding of the people who are participating in the change process, his credibility with them may be low or suspect.

Advantages:

(a) The use of experts helps us avoid continuously reinventing the wheel. An expert provides competence in research design, data collection, and data analysis techniques. He also prepares and presents reports that are both technically sound and readable.

(b) When the evaluation is assigned to an uninvolved expert, it is not likely to get lost or compromised as the "suction" of the OD project increases.

(c) Where evaluation is conducted by an expert, the comparability of studies is greater, and therefore, just as expert evaluation builds on prior learning it also adds to the accumulation of an OD literature which may be useful to others.

Disadvantages:

(a) Relying on an expert may foster dependence on the competencies of others. Internal resources are then not developed with competencies to monitor their own projects.

(b) While an outside expert is likely to come with a theory or model to guide his evaluation, and this is often an advantage, because of his lack of involvement in the particular OD enterprise, he may impose an inappropriate model for evaluation.

(c) The expert's evaluation may be out of step with the needs of the change process itself. The expert's report is often too late to become incorporated within the OD activity. There is difficulty in synchronizing both the collection of relevant data and the expert's feedback with the progress of the OD project itself (Weiss, 1972b).

(d) It is the expert, not the client organization, that "owns" the evaluation data. This magnifies the problem of acceptance of the data.

(e) What if you rely on an expert, and he is not really an expert at all? Some people are experts in organization development without understanding evaluation research very well.

2. What's the target? Just as the progress of a committee meeting can be compared against a clearly specified and agreed upon agenda, so an OD effort can be compared with what it started out to accomplish. The process of establishing a target is part of what is often called, "clarifying the contract." Is the target (or targets) clear? Are we agreed on our objectives? Are we all headed in the same direction? If there are multiple objectives, do they complement one another, are they independent of one another, or are they antithetical to one another?

Sometimes objectives, roles, and procedures are established because they appear both reasonable and necessary for approval of an OD project by top management or funding sources or granting agencies. Yet, once the project is launched these "public" objectives may seem unrealistic and inappropriate to the new situation. An organization continually changes, as do time frames, priorities, urgencies, personnel, etc. Therefore, a useful first step is the translation of these public objectives into obtainable and measurable targets.

Advantages:

(a) A major goal of OD projects is often to achieve clarity in problem-definition and goal-setting, and then to link up organizational resources toward achieving these agreed upon objectives. To establish a clear and agreed upon target therefore represents an accomplishment in itself (Beck & Hillmar, 1972).

(b) The earlier evaluation is agreed upon, the less likely evaluation will be lost in ensuing activities.

Disadvantages:

(a) Where there is a press for early convergence, this may lead to conformity, and thereby to solutions which are satisficing rather than optimizing.

(b) While clear and early attention to goals represents in itself a contribution to organizational effectiveness, action must follow otherwise people may experience confusion between stating objectives and obtaining results.

3. Did we hit the target? It is sometimes thought that the progress of a meeting can be side-tracked by evaluating its effectiveness while it is still in progress. It is also sometimes thought that organizational change is best measured after the change effort has been completed. Thus, some evaluation schemes urge, "wait until we're finished and then we'll see if we hit our target." In contrast to the second approach, this strategy assumes the objectives, resources, and the people involved as given, not as factors which themselves are subject to change. The question is, therefore, "Given this combination of objectives, procedures, resources, and people, what did we accomplish?"

Advantages:

(a) By focusing on the extent to which the desired outcomes have been achieved, as opposed to examining the means used to reach the target, people are more free to choose their own instrumental actions to reach their objectives.

(b) Just as managers often appear to be "process blind," so OD consultants are sometimes "task blind." It is easy to become so enamored with the dynamics of process, that one's evaluation of an OD effort may become sidetracked in considering process variables at the expense of end results.

(c) The evaluation of an end product meets the needs of onlookers or others concerned with accountability.

Disadvantages:

(a) This evaluation assumes that the target is the most important thing to evaluate. Had this perspective been applied in the Hawthorne studies, we might have learned that illumination levels are, in fact, associated with higher productivity (Roethlisberger & Dickson, 1939).

(b) At the termination of a project, energy is likely to be diffuse and interest turned elsewhere, so evaluation is often difficult.

(c) If the target is achieved and that's all one learns, the key features in understanding how or why the enterprise was successful may be missed. If the target is missed, it may be precisely because earlier opportunities for modification were bypassed and the collection of data was delayed until the project was completed.

Both of the problems in (c) are greater if an OD event is a one-shot occurrence, rather than the first in a sequential series of programmed developmental activities.

4. Mid-course correction. One item towards the middle of the agenda of a meeting might be, "How are we doing so far?" At the onset there is agreement to evaluate the progress of the meeting at a predetermined point (or points) with the clear intention that the meeting can be modified should the new information call for such action. A similar plan can be used to evaluate the progress of an OD project.

Advantages:

(a) It provides opportunity for change based on new information or new circumstances. An opportunity is also provided to assess the original goals. This is particularly appropriate where the project is of long duration or occupies a small percentage of people's time and attention on the job.

(b) The clear expectation is established that the focus is to shift to evaluation at a given point in time, thereby avoiding the seduction of the task to the exclusion of measuring progress.

Disadvantages:

(a) It provides a conflict for participants. Are they to be "good soldiers" by being loyal and optimistic supporters of the program or can they be open to contrary information. This conflict is particularly sharp where onlookers are skeptical. If dubious viewers question the value of the activity in which one is involved, it is difficult to admit publicly that there are some real drawbacks to the activity.

(b) One may overreact to point-in-time information, if the project is assessed at the top of an upswing or at the bottom of a downturn.

5. Continuous monitoring. An integral and continuous part of any OD effort is the expectation that we'll check on how we're doing by continuously generating relevant information. At the very heart of the concept of

organization development is the belief in the organization's capacity to generate relevant information and its ability to act on such information in ways that both expand and utilize resources effectively (Argyris, 1970). Thus, it is easy to see an evaluation process which continually monitors progress as the super-solution. It is therefore important to recognize that there are limitations and disadvantages to this method, and also to remember that the other four models are respectable alternatives, each with its own strengths.

Advantages:

(a) Cycling new information through the organization to check progress, expectations, and resources is itself central to the developmental process. Such an evaluation cycle builds competencies and linkages between action--new information--feedback--action.

(b) Evaluation is most timely if it is initiated by new information entering the system, rather than by a prearranged time or by the termination of the project.

(c) Sometimes environmental imperatives require us to begin an OD project without a programmatic model of change or a clearly specified target. In this case, a continuous process of evaluation provides data about the self-consistency of our approach to problems and also about the emerging goals of the OD project.

Disadvantages:

(a) This model calls for a high level of sophistication and skill by all parties involved. It requires the ability to move in highly disciplined and flexible ways from the demands of the task to fruitful examinations of the process by which people are working together. In choosing this model, the difficulties in achieving these skills and developing the required discipline should not be underestimated.

(b) The language developed, techniques employed, and the data utilized may become quite idiosyncratic to the parties involved, and therefore perhaps, less understandable and persuasive to others. It may be difficult for others to learn from this approach to evaluation.

What is learned from this evaluation model is more likely to be a set of skills geared to monitoring behavior within the system, and is less likely to provide data for accountability outside the project. This model is, therefore, probably not very persuasive to persons who are not themselves involved in the OD project.

(c) Due to the constancy of the evaluation cycle whenever new information is available, the focus of attention is probably on small units and one may be unable to see "the forest for the trees." Learnings and insights may be lost and must be rediscovered in subsequent projects, because the perspective is limited to short-term events.

(d) For small task forces this may be the model of choice, because the smaller the unit the more appropriate and possible are frequent review and evaluation. Due to the constraints of time, location, and competing tasks, it is difficult for large units or systems to continuously evaluate their progress.

While all five models have their strengths and their problems, they all suffer in varying degrees from defining the question of evaluation too narrowly. Three of the models focus on point-in-time measures (what's the target; did we hit the target; and mid-course correction). One of the other two models relies heavily on outside evaluation (i.e., ask the expert), whereas the continuous monitoring model relies heavily on internal resources. To provide information to onlookers and those concerned with accountability, asking the expert or asking did we hit the target probably perform better. As contributions to the development of resources internal to the project itself, early work on the target, mid-course corrections, and continuous monitoring probably offer more advantages.

Obstacles to Effective Evaluation

To many persons actively engaged in organization development, the need for more frequent and effective efforts at evaluation are clear; yet, there is widespread embarrassment due to our persistent lack of attention to evaluation and due to the lack of enduring credibility of our own folklore. Why isn't there a more sterling record of evaluating the results of OD efforts? We see three sources of the problem. There are obstacles to effective evaluation (a) in the client, (b) in the OD practitioner himself or herself, as well as (c) within the OD activity itself.

Obstacles in the Client

As stated at the beginning of this paper the questions--"How are we doing?" and "What are you doing?"--are likely to arise in any OD effort. Since both questions place pressure on the client to evaluate what he is doing, it is strange that there is such a paucity of well-regarded documentation and research on organization development. One way to understand the lack of evaluation studies, is to assume that there must also exist within the client strong countervailing forces serving as obstacles to evaluation. In addition to the time and cost concerns which are inherent in any decision to commit an organization to action, other more specific forces include (a) a belief that evaluation may disrupt the flow of the OD project; (b) a belief that the client system has already made its evaluation when it decided to launch the OD project; (c) a distrust that an evaluation study can adequately measure and report the real benefits of the project; and (d) a fear of negative or embarrassing data. These four forces are now discussed in more detail.

Evaluation as disruption. In most organizations research and development activities are typically separated from operations. When viewed as an institution, the research function has also been separated from the work-a-day world. Research is seen as the province of universities or special institutes and think tanks. One result of this separation is that many people see engaging in research as being at variance with the business of getting things done. The researcher or evaluator is seen as a foreigner, who thinks and writes a different "language." Since research is outside the day-to-day world of work, when one enters that world it is often seen as an interruption. In fact, in many ways research is a disruption.

Decisions already made. When an organization has identified a problem, searched for alternative responses, evaluated its alternatives, and decided to move ahead with a particular organization development scheme, it has in

fact invested heavily in evaluation activities. Many of us who are concerned with evaluation research tend to overlook this heavy, early investment by the client. To later suggest that the project be evaluated might understandably appear to the client as redundant or as second-guessing his decisions. The potential value of evaluation research after a change project is launched may not be self-evident to the client. He may need to be convinced of the utility in evaluating a commitment already made. One way to accomplish this is through the client's involvement in designing the process of evaluation (Campbell, 1969).

Distrust of the adequacy of attempts at evaluation. All complex organizations have elaborate monitoring, evaluation, and control systems which attempt to measure the quantitative and qualitative nature of ongoing activities. Management information systems, production control systems, inventory control systems, etc. become more and more sophisticated each year. However, our direct experiences with such systems of measurement teach us that often these systems do not adequately mirror the "real" state of affairs within our organizations. We see these inadequacies even where the activities being measured appear to be readily quantified. Our experience further tells us that when we try to measure complex and soft variables--such as how people are behaving--it is difficult to achieve valid results. The client's experience therefore leads to a scepticism (which in many ways is quite healthy) as to what can and cannot be evaluated or assessed.

Fear of results. A fourth obstacle within the client is the apprehension most of us have about evaluation. Namely, what is learned may be disturbing or embarrassing. It may call for action he doesn't want to take. The frequent reluctance of many people to see a physician when they find a lump has developed someplace in their body illustrates this concern. In fact, this example from the field of public health suggests a paradox: It may be that those organizations which most need the inspection provided by evaluation

research are those least interested in seeking such information.

Obstacles in the OD Practitioner

The obstacles found in the client organization are often mirrored within the OD practitioner. The OD professional may be apprehensive about the results of any evaluation, he may distrust the validity of evaluation processes, he may see evaluation as disruptive, and he may already be convinced that the decision to embark on an OD project is right. In addition, there may be even more obstacles within the professional. Anyone who has been an active producer or a consumer of field research studies knows of the myriad of problems, traps, and difficulties in conducting respectable research in an organizational setting. In a recent survey of members of the National OD Network, Armenakis (1973) reports that the selection and quantitative measurement of criteria was the problem most frequently mentioned by professionals in this field. The second and third ranking problems were difficulties in using comparison groups and in controlling for extraneous influences.

The complexities of these problems can give rise to one or both of the following questions within the OD practitioner:

(1) Do I (or do available colleagues) have the required competence in evaluation research to conduct a sound evaluation of the OD project given the enormous difficulties?

(2) Will the results of an evaluation be sufficiently valid (and convincing) to justify the time and resources involved? Will I be able to professionally support the results?

Obstacles in the OD Activity Itself

There are two obvious obstacles within the OD activity itself. First, the method of evaluation or documentation which has been chosen may not fit. It may not prove useful as the project unfolds. Where evaluation is seen as an intrusion, or as something which is beside-the-point but will have to be endured, then people are likely to find lots of reasons for not getting involved in evaluation. A second factor within the OD activity is that often such

activities are seductive and people become ego-involved in ways that reduce their ability to step back and view the project with dispassion and objectivity. There are sometimes moments in OD projects which generate affect similar to the intense emotional experiences found in T-groups. Where such a climate pervades the OD project, evaluation is easily viewed as irrelevant, if not profane. Recently, after a team building session in Chicago with an industrial client one of the authors walked more than six miles to cool himself out (a very uncharacteristic behavior for him).

Two Issues to Be Addressed

Whenever a cost-benefit analysis yields a "go" signal to evaluate an OD change effort, several important issues remain to be considered no matter what model of evaluation one chooses. We have chosen to address two issues because they are not treated in the same manner elsewhere and because a more exhaustive survey of issues is beyond the scope of this paper. Two issues which must be faced in any effort at evaluation are clarity of the role of evaluation and the audience to which the evaluation is addressed.

Clarity of the role of evaluation. Two decisions assist in clarifying the role of evaluation within the framework of the OD project. First, are the action functions to be separated from the evaluation research functions, in terms of (1) who does each, (2) are they to be separated in time during the project, and (3) are they to be integrated together into the fabric of the project? As we noted earlier, each of these approaches to evaluation has its own advantages and disadvantages. Here we are simply raising the issue of clarity. It is very helpful if there is clarity and shared agreement early in the life of the project about when and how evaluation is to take place. Similarly, there must also be clarity about who is to assume responsibility for evaluation. Where responsibility is unclear, given the other demands

mentioned above, it is easy for evaluation to "fall through a crack" and be overlooked by default rather than by decision.

Second, closely associated with any discussion of the role of evaluation, is the question, "What is the purpose of evaluation?" It is not enough for one to attempt to evaluate an OD project because one thinks he should, or because others appear to expect it. If an evaluation is to be worthwhile, it is well to examine its purposes. What will an evaluation permit us to say or do that we could not say or do otherwise? Documentation is often used to help others understand what you are doing when you yourself have little doubt of a project's present and future value. Whereas, research may raise questions about the value or usefulness of what you are doing or the way you are doing it. Therefore, questions about the purposes of evaluation raise their heads. Is the purpose to provide data for "believers?" Sometimes this increases their confidence in what they are doing. Is the purpose to attempt to persuade nonbelievers? If they are skeptics, sometimes a new set of carefully collected information can be persuasive. If they are confirmed disbelievers with emotional attachment to their position, there is little chance that an evaluation study will change their views. "Fully 35% boasts the promoter; only 35% sighs the detracter" (Weiss, 1972a, p. 32). Is the purpose to critically examine what's happening in the OD project and what its consequences seem to be? One must be prepared to face both positive and negative outcomes from research of this nature.

The Audience. There are three obvious consumers of the results of any evaluation of an OD project: the client organization, the OD consultant himself, and external audiences, including those who are members of the client organization but who are external to the OD project. Attention should be given to the relative importance of each of these three audiences. Several decisions are contingent upon determining the audience for the evaluation data:

what evaluation model to employ, what data to collect, when the feedback of data takes place, and in what form these data are fedback. An evaluation study which might be judged to be an outstanding article by editors of the Journal of Applied Behavioral Science could be worth little as input into the client system--the timing might be too late, the wording too technical, and the tone too general and impersonal. Conversely, evaluation results which the client may find intriguing and useful might be viewed with little interest by outsiders, because documentation is seen as inadequate or evidence of change as ambiguous.

Of these three potential audiences, the one we suspect is most easily overlooked or underweighted is the OD consultant. Documentation and evaluation of our efforts can serve both to increase our understanding of the complex, long-term, change activities in which we become involved, as well as to enhance our skills in subsequent efforts. Fritz Roethlisberger once said that one problem with managers is that they just don't learn from their experience. Experience per se in organization development is no guarantee that we are becoming more professionally competent. Evaluation data can provide opportunities to learn from experience--opportunities that the experiences themselves do not provide. Recently, Clark stated, "The need for codification was driven home to me when, at a conference, I was asked by a young graduate student in psychology, 'How do you know what to do when you intervene in the life of an organization?' I bluffed, bumbled, and fumbled. Later I tried to analyze why my response was so inadequate. I came up with the reason that, as yet, there has been little codification of our experience as practitioners and little connection made between theory and practive" (1973, p. 640). Friedlander and Brown (1974) contend that "the more sophisticated our efforts at evaluation and validation become the more likely we will be able to develop research methods and competencies.... so that our change efforts will become

more and more research directed and data based, as opposed to being based on the exploration of good intentions."

Finally, evaluation studies can increase the visibility of the OD professional both within and outside his or her organization. Such visibility sometimes provides opportunities for opening minds that are skeptical or opening doors which otherwise would remain closed.

Once evaluation data are collected, our interest is likely to turn to the question of how widely this information can be disseminated. Who are the appropriate audiences? Every organization has proprietary interests and some concerns about confidentiality. These matters need to be clarified and understood by the client and the researcher before the study begins. Both authors have been impressed with the great differences between organizations about how open they are with data collected internally. Often the policies and expectations of an organization cannot be inferred either from its commitment to experiment and change or in the face-to-face behavior of members of that organization.

As in previous sections of this paper, we have left hundreds of questions unstated. In addition, we have not addressed two major issues which are sure to arise whenever a decision to evaluate an OD project is under consideration: (1) relevant data--who provides the data, who provides the criteria, when are data gathered, who collects the data, and are explicit linkages made between the data collected and the expressed goals of the organization? (2) Appropriate research procedures--what is the design of the evaluation study, is an action research model to be employed, is the study to use a clinical approach or is it to be based on statistical analyses, are control or comparison groups to be used? Carol Weiss addresses these issues of relevant data and choosing research procedures in her book Evaluation Research (1972a).

Summary

Models of five alternative ways to approach the evaluation of OD projects were sketched: (1) Ask the expert; (2) What's the target?; (3) Did we hit the target?; (4) Mid-course correction; and (5) Continuous monitoring. Each model provides a different perspective on the problem of evaluation and each contains certain advantages and disadvantages. The five approaches were next put into organizational context by a survey of some major obstacles to effective evaluation studies. Persistent obstacles were found in the client, in the OD consultant, and within the OD activity itself. In the final section, two issues were addressed which must be faced in any effort to evaluate an OD program--clarity of the role of evaluation and the audience of the evaluation.

References

Argyris, C. Intervention Theory and Method. Reading, Mass.: Addison-Wesley, 1970.

Armenakis, A. A. Practices and Problems of OD Practitioners in Conducting Evaluations of OD Efforts. Unpublished paper, Auburn University, June, 1973.

Beck, A. C. Jr. & Hilmar, E. D. (Eds.) A Practical Approach to Organization Development Through MBO. Reading, Mass.: Addison-Wesley, 1972.

Campbell, D.T. Reforms as experiments. American Psychologist, 1969, 24 209-249.

Clark, A. W. From sound intuition to better theory. Journal of Applied Behavioral Science, 1973, 9, 638-641.

Friedlander, F. & Brown, L. D. Organization development. Annual Review of Psychology, 1974, 25, 313-342.

Roethlisberger, F. J. & Dickson, W. J. Management and the Worker. Cambridge, Mass.: Harvard University Press, 1939.

Weiss, C. Evaluation Research: Methods of Assessing Program Effectiveness. New York: Prentice-Hall, 1972(a).

Weiss, C. W. A treeful of owls. In C. W. Weiss (Ed.), Evaluating Action Programs: Reading in Social Action and Education. Boston: Allyn and Bacon, 1972(b).

Weiss, R. S. & Rein, M. The evaluation of broad-aim programs: Experimental design, its difficulties, and an alternative. Administrative Sciences Quarterly, 1970, 15, 97-109.

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